

## General Information

Reflexite® VC309/310 Durabright® (for the rest of this document referred to just as Reflexite Durabright) are tough weather and solvent resistant products designed for graphics applications on vehicles. It is easy to apply to smooth painted or unpainted vehicle surfaces. For more information, please reference Technical Product Bulletins, which are available from local Reflexite Sales offices. Read carefully through the full application instructions, before commencing the application process.

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## BEFORE APPLICATION STARTS

### STEP 1: Surface Preparation

Successful adhesive bonding always starts with surface preparation. To achieve a strong and permanent bond, it is important to remove all contaminants so as to provide a smooth, clean and dry surface before applying the adhesive. The surface must be **thoroughly** cleaned of all grease, road film and any other materials that will affect the adhesive bond. A typical household cleaner works fine. Best results are achieved by removing old paint chips, burrs etc.

### STEP 2: Substrate Cleaning & Application Guidelines

The user is responsible for determining whether the Reflexite® product is fit for a particular purpose and suitable for the user's application. Users are urged to carefully evaluate substrates for material adhesion and compatibility. Listed below are guidelines for selected substrates. Material failures caused by the substrate or improper surface preparations are not the responsibility of Reflexite (Please contact the Reflexite European Technical Centre on tel. +353 51 334871 for any further information required).

#### Two-part Polyurethane Paints

Two-part polyurethane paints must be cured before applying Reflexite Durabright. If the paint is not properly cured, bubbles will form under the applied material, caused by outgassing or the adhesive will not adhere adequately. Reflexite recommends testing for outgassing prior to applying Reflexite sheeting. For drying times, paint manufacturers' guidelines are to be followed in all instances. While most paints are usually touch-dry within a few hours, dependent upon the primer and paint mixture and thickness, proper curing may make significantly longer, up to one week.

#### GRP (Glass Reinforced Plastics)

Similar guidelines to the above will apply for composite materials such as GRP substrates, in that the substrate must be fully cured before applying, otherwise outgassing may result.

#### Stainless Steel

Reflexite® products may be used on stainless steel when used with the correct pressure sensitive adhesive.

### STEP 3: Application Temperature

The recommended application substrate temperature range to achieve the best results is between 15°C to 38°C. Surfaces should be warmed up in order to achieve optimum substrate temperatures.

## APPLICATION

### STEP 4: Mark the Area to be Lettered or Striped.

This can be done in three ways:

- **Masking Tape Method:**  
Using masking tape, mark a level line and centre line on surface to be lettered or striped. Use the horizontal mark and align the bottom of the lettering on this line.
- **Rivet Line Method:**  
Use the rivet line on a van trailer as a guide for applying roll material. Use rivets as guide for positioning tape roll, start at one end, peel a small portion of the adhesive liner away from the end of the roll and fold it back against itself. Apply the exposed portion of the tape to target surface.
- **Chalk Line Method:**  
Use this method for the sides of tank trailers, start in the middle of the trailer and work out to the ends. This method will make staying on the plumb line easier.

NOTE! It is important not to touch the adhesive side of the material during application.

### **STEP 5: Choosing Wet or Dry Method of Application**

If applying material to emergency service vehicles such as ambulances, fire trucks, cars or vans, use the wet method. If you are applying tape to trucks, trailers or other long vehicles, use the dry method.

#### **WET METHOD**

**When:**

If applying material to emergency service vehicles such as ambulances, fire trucks, cars or vans, use the wet method

**How:**

Use a mixture of 98-99 parts water and 2-1 parts liquid soap in an 8-12 ounce spray bottle. Remove the decal from its backing starting at one corner and pulling up. Spray the stick side of the decal or tape lightly. Also spray the surface to be lettered, and apply the wet decal to this surface (the moisture allows for easier positioning).

Using a squeegee, burnish out soap and water working from the middle in all directions. Wipe away any excess water and allow to dry. Usually 10 minutes or less depending on air and surface temperature. A squeegee sleeve is recommended to be fitted to the squeegee to prevent scratching during application.

Care should be taken not to use too much pressure when squeegeeing into place as this could stretch the film. All Reflexite Durabright films have a high tack adhesive and require minimal pressure during application.

If the lettering has masking paper on top of its surface, remove masking (transfer film) by folding a top corner and slowly pull back, flat against the surface. DO NOT PULL OUTWARD – this could cause letters to lift if not dry enough. Gently wipe off alignment marks and allow to dry thoroughly for a few days before washing or waxing this part of the vehicle. If an air bubble exists after you squeegee, puncture with the corner of a razor or pin and squeegee to the edge.

After completing this process, **re-apply** pressure using a squeegee to the edges.

#### **DRY METHOD**

**When:**

If you are applying tape to trucks, trailers or other long vehicles, use the dry method.

**How:**

Slowly remove the adhesive liner, by peeling it in the direction of the fold. Continue down the side of the vehicle. Use a straight razor or knife, cut material at ridges and rivets. Material will tent up over rivets, cut an X on the rivet and then cut around rivet with a straight edge. Remove material thoroughly around each rivet. Once material is applied begin squeegeeing at one end. Place the squeegee in a horizontal position at the middle of the tape and push out to the edge in an up and down motion. Continue in this manner the entire length of the tape. If an air bubble exists after you squeegee, puncture with the corner of a razor or pin and squeegee to the edge.

Re-positioning. The adhesive has a high initial tack and is very difficult to re-position after application. Do not let the tape touch any surface before positioning to the correct location, for this reason.

## **GENERAL APPLICATION TIPS**

### **Application to curved surfaces and corners / edges**

The material conforms to flat or simple shallow curved surfaces (single radius). It is not suitable for use on complex curves (where the surface bends in two directions) as it is not stretchable. Although it may conform, on initial application, it is liable to lift after one to two weeks.

NOTE! It is important not to stretch the film around curves. The material should not be applied around corners or edges (e.g. door edge, wheel arch etc). Instead it should be cut back 6mm (1/4") in front of the edge.

### **Cutting Panels / Tapes**

The material can be easily cut with a sharp knife. Hold the knife at an angle of 45 degrees from the surface. This leaves the tape with a slightly recessed edge (e.g. if cut around a door handle) which prevents lifting of the edge during mechanical or power washing.

### **Edge Sealing After Cutting**

This is not necessary after cutting, as the material is single layer.

### **Butt Joints**

When more than one piece of reflective material is required to form a continuous marking on a substrate, pieces should be butt jointed and **not** over-lapped onto one another.

### **Tape Corners**

It is recommended that the square edges be rounded to give improved cosmetics and to minimise risk of corners being lifted by mechanical / power washers.

### **Cosmetics**

The manufacturing process means that a thin "weld line" appears across the width of the material/tape approximately every 225mm (9"). This is not a manufacturing flaw and the material cannot be supplied without these lines. For the same reason, an exceptionally thin line

may occasionally be seen running the length of the tape / material. This is virtually invisible to the naked eye, when viewed from one meter (3 ft) away.

**Application of reflective sheeting over reflective sheeting**

Reflexite does not recommend applying any reflective sheeting (e.g. Reflexite® VC309/310 Durabright® or Reflexite® VC311/312 Daybright®) over the sheeting to create a chevron effect or lettering. This practice violates the warranty.

**Application of reflective sheeting over vinyl**

Reflexite does not recommend applying Reflexite Durabright over vinyl sheeting. This practice violates the warranty.

## AFTER APPLICATION

**Bonding Time**

It is recommended that, whenever possible, 24 hours adhesion is allowed to build up between the substrate and material before putting the vehicle into service.

**Storage of Material / Tape**

Tape rolls should be stored in the box supplied when not in use, sitting on waxed paper squares or circles at each end of the roll. This prevents dirt / particles sticking to the tape edges and protects the roll. Material should be stored in a cool, dry area, preferably at room temperature (18-23°C).

Kit material should not be stored face to face. It is recommended to store cut kit material with siliconised slip-sheets in between for protection and to avoid material face to face contact, either folded inwardly or outwardly particularly when stacked and stored.

**Removal**

When removing this type of material for repair damage or de-commissioning of vehicles, it is recommended that you use a hot air gun to gently warm the film prior to removal. This will help soften the adhesive and make removal easier. Once the adhesive has been warmed, lift one side of the film and slowly pull back, flat against the surface. An amount of adhesive may remain on the vehicle and this can be removed by dabbing a piece of Reflexite Durabright onto these areas, adhesive side down, or by using isopropyl alcohol / thinners with a clean cloth.

**Painting after application**

Reflexite does not recommend painting on or close to the reflective sheeting, after Reflexite Durabright has been applied to the vehicle. This practice violates the warranty.

## CARE INSTRUCTIONS

Reflexite Durabright can be washed manually by brush, cloth or sponge using water, soap or detergent followed by a clean water rinse. If an automatic truck / car wash or standard high-pressure hand spray is used, please follow these recommendations:

- Maximum pressure – 1200 PSI / 80 bar
- Maximum water / wash solution 60° C
- 40° Nozzle cone opening size should be used
- Cleaning wand or jets to be at no greater angle than 45 degrees from perpendicular to the marking surface
- Hold the cleaning jet a minimum of 60cm away from the material

When using cleaners, follow the manufacturer's recommendations for dilution. Thoroughly rinse after soaking vehicle.

**IMPORTANT NOTICE**

All Reflexite products are subject to careful quality control throughout the manufacturing process and are warranted to be of merchantable quality and free from manufacturing defects. Published information concerning Reflexite products is based upon research which the Company believes to be reliable although such information does not constitute a warranty. Because of the variety of uses of Reflexite products and the continuing development of new applications, the purchaser should carefully consider the suitability and performance of the product for each intended use, and the purchaser shall assume all risks regarding such use.

All specifications are subject to change without prior notice.

**Reflexite European Conversion Center**

Cork Road, Unit 4, Industrial Estate, Waterford, Ireland  
Tel. +353 51358132 / Fax: +353 51358258  
www.reflexite-europe.com

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